SANTA CRUZ BIOTECHNOLOGY, INC.

GST (A-6): sc-374171

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Plasmid vectors for the expression of coding regions of eukaryotic genes in *E. coli* are in common usage; such expression vectors often encode hybrid fusion proteins containing part prokaryotic and part eukaryotic specified proteins. For instance, the pGEX.3X expression vector developed by Smith and Johnson allows for synthesis of fusion proteins between glutathione-S-transferase (GST) and proteins encoded by inserted cDNA sequences. Antibodies derived from these GST fusion proteins are useful for checking protein expression both in plaques and on Western blots as well as for immunoaffinity purification of proteins expressed in *E. coli.*

SOURCE

GST (A-6) is a mouse monoclonal antibody raised against a sequence of GST of origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GST (A-6) is available conjugated to agarose (sc-374171 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374171 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374171 PE), fluorescein (sc-374171 FITC), Alexa Fluor® 488 (sc-374171 AF488), Alexa Fluor® 546 (sc-374171 AF546), Alexa Fluor® 594 (sc-374171 AF594) or Alexa Fluor® 647 (sc-374171 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374171 AF680) or Alexa Fluor® 790 (sc-374171 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

GST (A-6) is recommended for detection of GST fusion proteins and glutathione-S-transferase (GST) of *Schistosoma japonicum* origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of GST: 26 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

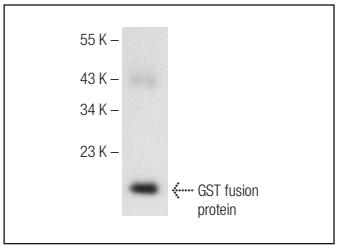
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



GST (A-6): sc-374171. Western blot analysis of *S. japonicum* recombinant GST fusion protein.

SELECT PRODUCT CITATIONS

1. Worrad, D.M., et al. 1994. Reversing effect of sorcin in the drug resistance of human nasopharyngeal carcinoma. Development 120: 2347-2357.
2. Sisci, D., et al. 2007. The estrogen receptor α:Insulin receptor substrate 1 complex in breast cancer: structure-function relationships. Ann. Oncol. 18: vi81-5.
3. Patra A.K., et al. 2013. An alternative NFAT-activation pathway mediated by IL-7 is critical for early thymocyte development. Nat. Immunol. 14: 127-135.
4. Mandal, R., et al. 2014. pERK 1/2 inhibit caspase-8 induced apoptosis in cancer cells by phosphorylating it in a cell cycle specific manner. Mol. Oncol. 8: 232-249.
5. Cui, Y., et al. 2015. Cytokine-induced killer cells induce apoptosis and inhibit the Akt/nuclear factor-κB signaling pathway in cisplatin-resistant human glioma U87MG cells. Mol. Med. Rep. 12: 7027-7032.
6. Li, R., et al. 2016. Lyn prevents aberrant inflammatory responses to *Pseudomonas* infection in mammalian systems by repressing a SHIP-1-associated signaling cluster. Signal Transduct. Target. Ther. 1: 16032.
7. Duan, Z., et al. 2017. Characterization of the nuclear import pathway for BLM protein. Arch. Biochem. Biophys. 634: 57-68.
8. Chen, Y., et al. 2018. Mutually exclusive acetylation and ubiquitylation of the splicing factor SRSF5 control tumor growth. Nat. Commun. 9: 2464.
9. Juettner, V.V., et al. 2019. VE-PTP stabilizes VE-cadherin junctions and the endothelial barrier via a phosphatase-independent mechanism. J. Cell Biol. 218: 1725-1742.
10. Jeong, W.J., et al. 2019. WDR76 is a RAS binding protein that functions as a tumor suppressor via RAS degradation. Nat. Commun. 10: 295.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.